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| FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 1300 I STREET, NW WASHINGTON, DC 20005 | | | LAMM, MARINA | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1616 | |

DATE MAILED: 07/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/881,097

Applicant(s)

DE LA POTERIE ET AL.

Examiner

Marina Lamm

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12, 13 and 15-59 is/are pending in the application.
4a) Of the above claim(s) 57 and 58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12, 13, 15-56 and 59 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission has been entered.
2. Claims pending are 1-10, 12, 13 and 15-59. Claims 11 and 14 have been cancelled. Claims 1, 54, 55 and 56 have been amended. Claims 57 and 58 have been withdrawn from consideration as directed to non-elected invention.
3. The Applicant has previously elected polycaprolactones as thermal transition agents and polyurethanes as film-forming polymers.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claims 12 and 13 recite the limitation "the melting point". There is insufficient antecedent basis for this limitation in the claim. Applicant is invited to cancel Claims 12

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and 13, since Claim 11 which contained the recitation of waxes having specific melting point has been cancelled and waxes are now outside of the scope of the base claims.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-10, 15-31 and 46-56 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoefer et al. (US 5,312,865).

Hoefer et al. teach compositions for coating leather, said compositions containing 5-80% of an aqueous dispersion of polyurethane particles having an average particle size of 40-400 nm, said dispersion containing 30-60% of solids by weight. See Abstract; col. 5, lines 51-65. The polyurethane of Hoefer et al. is prepared from a mixture of polycaprolactone diols having OH value of 15 to 540 and a molecular weight of 230 to 10,000. See col. 3, lines 13-20; Example 1. The coating compositions of Hoefer et al. may contain pigments, preservatives, acrylic polymers, waxes and other additives. See col. 6, lines 10-24. The recitation of transition temperature, water solubility and film resistance in the instant claims is inherent in the reference because the reference teach the same polymers used in the same concentration as disclosed and claimed herein.

Thus, Hoefer et al. teach each and every limitation of Claims 1-10, 15-31 and 46-56.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 59 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hoefer et al.

Hoefer et al. applied as above. Hoefer et al. teach that their compositions may contain wetting agents (surfactants). See col. 6, line 11. Further, their compositions may contain aqueous emulsions of waxes. See col. 6, lines 22-23. The reference does not explicitly teach emulsifiers of the instant claim. However, in order to incorporate waxes into aqueous emulsions, one of ordinary skill in the art would have been motivated to employ emulsifiers. It is the Examiner's opinion that the determination of optimal or workable concentration of the emulsifier by routine experimentation is obvious absent showing of criticality of the claimed concentration. One having ordinary skill in the art would have been motivated to do this to obtain the desired coating and film-forming properties of the composition.

Allowable Subject Matter

11. Claims 32-45 are objected to as being dependent upon a rejected base claim, but would be allowable if (a) rewritten in independent form including all of the

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limitations of the base claim and any intervening claims and (b) limited to the elected species.

12. The Applicant is advised that the search cannot be reasonably extended to other species of semi-crystalline thermal transition agent since no other species have been identified in the specification. Since the thermal transition agents (except for polycaprolactone) are described in the specification/claims in terms of the properties and physical structure, rather than in terms of the chemical structure, it would require undue amount of experimentation to identify such agents. Accordingly, the following rejection is applicable to the non-elected species of the thermal transition agent:

13. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

14. Claims 1-10, 12, 13, 15-18, 20-56 and 59 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for polycaprolactones as semi-crystalline thermal transition agents, does not reasonably provide enablement for any other semi-crystalline thermal transition agents having the claimed transition temperature and film resistance. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

The first paragraph of 35 U.S.C. 112 states, "The specification shall contain a written description of the invention, and of the manner and process of making and

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using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same..." The courts have interpreted this to mean that the specification must enable one skilled in the art to make and use the invention without undue experimentation. The courts have further interpreted undue experimentation as requiring "ingenuity beyond that to be expected of one of ordinary skill in the art" (Fields v. Conover, 170 USPQ 276 (CCPA 1971)) or requiring an extended period of experimentation in the absence of sufficient direction or guidance (In re Colianni, 195 USPQ 150 (CCPA 1977)). Additionally, the courts have determined that "... where a statement is, on its face, contrary to generally accepted scientific principles", a rejection for failure to teach how to make and/or use is proper (In re Marzocchi, 169 USPQ 367 (CCPA 1971)). Factors to be considered in determining whether a disclosure meets the enablement requirement of 35 U.S.C. 112, first paragraph, have been described in In re Colianni, 195 USPQ 150, 153 (CCPA 1977), have been clarified by the Board of Patent Appeals and Interferences in Ex parte Forman, 230 USPQ 546 (BPAI 1986), and are summarized in In re Wands (858 F2d 731, 737, 8 USPQ2d 1400, 1404 (Fed Cir. 1988)). They include: (1) the nature of the invention, (2) the state of the prior art, (3) the predictability or unpredictability of the art, (4) the relative skill of those in the art, (5) the breadth of the claims, (6) the amount or direction or guidance presented, (7) the presence or absence of working examples, and (8) the quantity of experimentation

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necessary. When the above factors are weighed, it is the Examiner's position that one skilled in the art could not practice the invention without undue experimentation.

(1) the nature of the invention

The invention is directed to compositions for a keratinous material, such as mascara and other make-up and cosmetic compositions, comprising (a) at least one film-forming agent; and (b) at least one thermal transition agent chosen from semi-crystalline compounds, which undergoes a change of state at a transition temperature, T_t , chosen within a temperature range from 25°C to 80°C , the at least one thermal transition agent being not water-soluble in water maintained at a temperature below the transition temperature, T_t , wherein the at least one film-forming polymer and the at least one thermal transition agent are present in an amount which is sufficient so that the composition is capable, at the temperature of the keratinous material, of forming a film having a resistance (R_c) to hot water maintained at 40°C , of less than or equal to 15 minutes, and a resistance (R_f) to cold water, maintained at 20°C such that $R_f - R_c \geq 8$ minutes, and further wherein said at least one film-forming polymer and said at least one thermal transition agent are the same or different.

(2) the state of the prior art

The film-forming polymers of the instant claims are well known. The elected species of the thermal transition compounds, i.e. polycaprolactones, are also known. Thus, Hoefer et al. teach coating compositions containing polyurethanes prepared from polycaprolactones as discussed above. Perez et al. (US 6,432,527) teach that semi-

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crystalline polymers consist of a mixture of amorphous regions and crystalline regions. See col. 2, lines 26-27. Further, some polymers are always amorphous, some crystallizable, and some can be made semicrystalline by heat treatment, stretching or orienting, and by solvent inducement. See col. 2, lines 30-41. Further, Kim et al. (US 6,335,003) teach using cationic polyurethanes and polyureas having a glass transition temperature of 25-140⁰ C in cosmetic compositions but is silent with respect to the crystalline structure of the polymers. See Abstract; col. 5, lines 65-67.

(3) the predictability or unpredictability of the art

The "predictability or lack thereof" in the art refers to the ability of one skilled in the art to extrapolate the disclosed or known results to the claimed invention. If one skilled in the art can readily anticipate the effect of a change within the subject matter to which the claimed invention pertains, then there is predictability in the art. On the other hand, if one skilled in the art cannot readily anticipate the effect of a change within the subject matter to which that claimed invention pertains, then there is lack of predictability in the art. Accordingly, what is known in the art provides evidence as to the question of predictability. See MPEP 2164.03. In this case, the prior art teaches that some polymers can be made semicrystalline by various treatments. The prior art lacks predictability in regards to the crystalline structure of thermal transition polymers and how the crystalline structure affects glass transition temperature.

(4) the relative skill of those in the art

The relative skill of those in the art of polymers is high and requires at least Master's level of education.

(5) the breadth of the claims

The claims are very broad. They encompass dozens if not hundreds of structurally different compounds. The thermal transition agents of the instant claims are not limited to polymers.

(6) the amount of direction or guidance presented

The instant specification on p. 7 discloses that thermal transition agents may be polymers having certain OH number and exemplifies one class of polymers, i.e. polycaprolactones. The other identified class of thermal transition agents, i.e. waxes, are outside of the scope of the claimed as amended because waxes are crystalline compounds. The specification does not provide any guidance as to how one skilled in the art would go about selecting other semi-crystalline thermal transition agents that have the required transition temperature and hot water solubility. All the relevant examples exemplify polycaprolactone as the thermal transition agent. One skilled in the art would not be able to identify the meets and bound of the claims, i.e. which thermal transition agents fall within the scope of the claims and which do not fall within the scope of the claims, without undue amount of experimentation. Thus, the enabling disclosure is limited to polycaprolactones.

(7) the presence or absence of working examples

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The specification does not provide any working examples that exemplify semi-crystalline thermal transition agents other than polycaprolactones.

(8) the quantity of experimentation necessary

The specification provides insufficient guidance with regard to the claimed properties of the compound and contains no working examples and no evidence which would allow one of skill in the art to predict what compounds can be used as semi-crystalline thermal transition agents having the specified transition temperature with a reasonable expectation of success. Moreover, the nature of the invention and the state of prior art has not provided any reasonable expectation of success in selecting the thermal transition agents within the scope of the claims. For the above reasons, it appears that one skilled in the art could not practice the invention with the claimed breadth without an undue amount of experimentation.

Conclusion

15. No claim is allowed at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Lamm whose telephone number is (571) 272-0618. The examiner can normally be reached on Mon-Fri from 11am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz, can be reached at (571) 272-0887.


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The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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